

Mortality is an important indicator of the health of a population. It is defined as the number of deaths in a defined population at a specific period of time. Mortality data in this report can be used to:

- Identify particular populations and communities at greater risk of death from specific diseases and injuries.
- Inform health care and public health planning, resource allocation, and priorities for research and prevention.
- Identify and highlight social disparities in health and mortality, which can help to better target resources and strategies that address inequitable societal conditions causing the disparities.
- Identify and characterize emerging public health threats.

Key Points from this Report

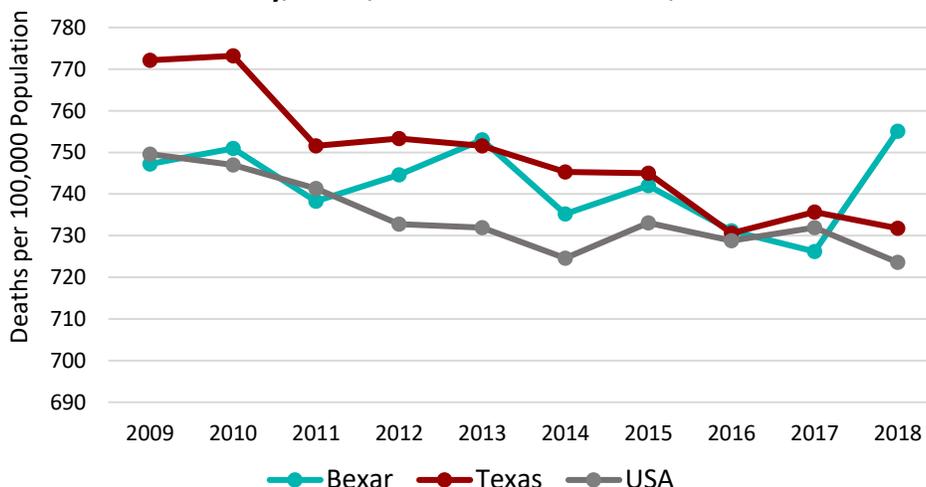
In 2018:

- Bexar County's overall age-adjusted mortality rate increased from 2017-2018, surpassing the rate of both Texas and the US overall. Heart disease and cancer are consistently the top causes of death.
- Comparing the 10 largest counties in Texas, Bexar County had the highest age-adjusted mortality rate.
- Bexar County males had approximately a 50% higher overall risk of death compared to females.
- Non Hispanic (NH)-Black individuals in Bexar County had the highest age-adjusted mortality rate. This is largely due to the fact that they led the mortality rate for both cancer and heart disease.
- Between 2017-2018, there was a 15% increase in the age-adjusted mortality rate for chronic kidney disease and a 9% increase in the age-adjusted mortality rate for accidents.
- NH-White individuals died from chronic lower respiratory disease at twice the rates of NH-Black individuals and Hispanic/Latinos.
- NH-Black individuals died from homicide at a rate 3-4 times higher than NH-White individuals and Hispanic/Latinos.
- Among those in mid-adulthood (35-54 years old), breast cancer was the most common cause of cancer mortality. Among those in older adulthood (55+), lung cancer was the most common cause of cancer mortality, followed by colon cancer.

In 2018, Bexar County's age-adjusted mortality rate was **755.1 per 100,000**, higher than the rate for Texas (731.8 per 100,000 population) and the US (723.6 per 100,000 population).

This is a contrast from 2017, when the Bexar County mortality rate fell just below that of Texas and the US.

Figure 1. All-Cause Age Adjusted Mortality Rate: Bexar County, Texas, and the United States, 2009-2018



**Table 1. Mortality across the Ten Largest Counties in Texas, 2018**

Location	Deaths	Population	Age-Adjusted Mortality Rate
1. Bexar County	14,165	1,986,049	755.1
2. Dallas County	16,679	2,637,772	732.4
3. Tarrant County	13,493	2,084,931	732.1
4. Harris County	27,167	4,698,619	693.8
5. El Paso County	5,604	840,758	679.5
6. Travis County	5,982	1,248,743	621.3
7. Denton County	3,890	859,064	604.7
8. Hidalgo County	4,463	865,939	586.0
9. Collin County	4,704	1,005,146	578.9
10. Fort Bend County	3,513	787,858	548.9
Texas	202,211	28,701,85	731.8
USA	2,839,205	327,167,434	723.6

A total of 14,165 deaths were registered in Bexar County in 2018 - 885 more than in 2017. This resulted in a 4% increase in the age-adjusted mortality rate from 2017 to 2018.

Comparing the 10 largest counties in Texas, Bexar County had a higher 2018 mortality rate than all the other counties.

*Rates are per 100,000 population; age-adjusted rates are adjusted to the 2000 Standard Population



Mortality rates can be reported as crude rates or age-adjusted rates. **Crude rates** are simply calculated as the number of deaths in a place divided by population size of that place. They do not take the age-distribution of the population in that place into consideration. However, to compare mortality rates between one place and another, or between one time point and another, age-adjusted rates are necessary. **Age-adjusted rates** are calculated using statistical techniques that weigh the different age-groups according to a reference, standard population, thus eliminating the effect of different age distributions when making comparisons.

Mortality by Age and Sex

Table 2. Total Deaths and Mortality Rates by Age-group in Bexar County, 2017 and 2018

Age Group	2017			2018			Percent Change between 2017 and 2018
	Deaths	Population	Crude Rate	Deaths	Population	Crude Rate	
<1 year	178	28,308	628.8	186	27,665	672.3	+6.9
1-14	62	393,236	15.8	61	396,303	15.4	-2.6
15-24	194	287,062	67.6	202	287,844	70.2	+3.8
25-44	854	574,005	148.8	851	586,381	145.1	-2.5
45-64	2,879	444,085	648.3	3,046	447,235	681.1	+5.1
65-74	2,543	138,416	1,837.2	2,732	143,813	1,899.7	+3.4
75-84	2,939	65,367	4,496.2	3,140	68,271	4,599.3	+2.3
85+	3,630	28,099	12,918.6	3,947	28,537	13,831.2	+7.1

*Rates are per 100,000 population



- **One third of deaths in 2018 were among those less than 65 years old.**
- In Bexar County, age-specific mortality rates increased from 2017 to 2018 for most age-groups, except for the 1-14 and 25-44 age-groups where mortality rates decreased.
- In 2018, males accounted for 53% of total deaths in Bexar County while females accounted for 47%.
- **Mortality for both males and females increased between 2017 and 2018: The adjusted mortality rate increased by 4.0% for women and 25.8% for men.** In general, men are less likely to seek medical care and comply with medical instructions than women. There is also evidence that men are more likely to engage in risky and dangerous activities.
- The male-to-female age-adjusted mortality rate ratio was 1.46 in 2018. This means that males had a 46% higher overall risk of death than females in 2018.

Table 3. Total Deaths and Age-Adjusted Mortality Rates by Sex in Bexar County, 2017 and 2018

Sex	2017			2018			Percent Change between 2017 and 2018
	Deaths	Population	Age Adjusted Rate	Deaths	Population	Age Adjusted Rate	
Female	6,300	991,717	601.9	6,712	1,005,533	625.8	+4.0
Male	6,980	966,861	726.2	7,453	980,516	913.9	+25.8

*Rates are per 100,000 population; age-adjusted rates are adjusted to the 2000 Standard Population

Mortality by Race/Ethnicity

Table 4. Total Deaths and Age-Adjusted Rates by Race/Ethnicity in Bexar County, 2017 and 2018

Race/Ethnicity	2017			2018			Percent Change between 2017 and 2018
	Deaths	Population	Age Adjusted Rate	Deaths	Population	Age Adjusted Rate	
Non-Hispanic White	5,740	559,391	759.9	6,015	560,131	784.2	+3.2
Non-Hispanic Black	1,079	148,883	877.7	1,157	152,056	909.8	+3.7
Hispanic/Latino	6,188	1,181,315	686	6,629	1,201,366	710.9	+3.6
Asian/Pacific Islander	176	63,459	388.2	215	66,953	424.1	+9.2
American Indian/ Alaska Native	**	5,530	**	**	5,543	**	**

*Age-adjusted rates are adjusted to the 2000 Standard population.

**Data is suppressed when numbers are too small to meet confidentiality requirements.

NH-Black individuals had the highest age-adjusted mortality rate among all the race/ethnicity groups, in both 2017 and 2018. More specifically, NH-Black individuals had a 28% increased risk of death compared to Hispanics, and a 16% increased risk of death compared to NH-Whites individuals.



Leading Causes of Death – Overall

Table 5. Number of Deaths and Age-Adjusted Rates for 10 Leading Causes of Death in Bexar, Texas and USA, 2017 and 2018

Cause of death	2017		2018			
	Deaths	Age-Adjusted Rate	Deaths	Age-Adjusted Rate	Texas Age-Adjusted Rate	USA Age-Adjusted Rate
1. Heart Disease	3,113	171.1	3,288	175.7	170.0	163.6
2. Cancer	2,619	141.5	2,787	146.3	142.9	149.1
3. Stroke	743	41.6	793	43.3	40.3	37.1
4. Accidents	698	36.9	775	40.1	37.7	48.0
5. Alzheimer's Disease	668	39.0	719	40.4	38.4	30.5
6. Chronic Lower Respiratory Diseases	582	33.0	635	34.7	39.7	39.7
7. Diabetes Mellitus	466	25.5	489	25.9	21.1	21.4
8 Chronic Liver Disease and cirrhosis	356	18.2	360	18.4	13.9	11.1
9. Nephritis, nephrotic syndrome, nephrosis	259	14.3	311	16.5	16.4	12.9
10. Septicemia	303	16.4	292	15.3	15.7	10.2

*Age-adjusted rates are adjusted per 2000 Standard Population.

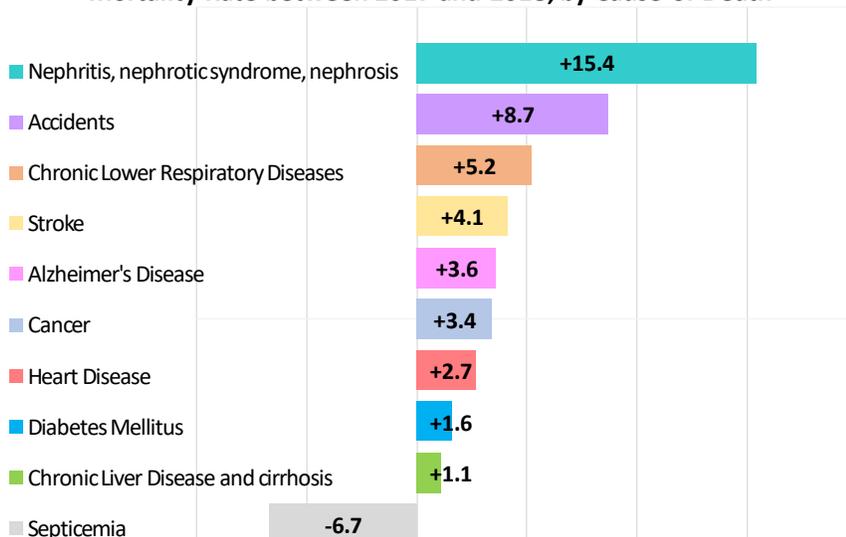
Heart disease accounted for 25% of 2018 deaths

The major forms of heart diseases affecting Bexar County were ischemic heart disease, complications from heart disease, and heart failure.

Cancer accounted for 20% of 2018 deaths

The top 5 cancers with the highest age adjusted mortality rate included: lung, lymphatic and blood, breast, colon and liver cancers.

Figure 2. Percent Change in Bexar County Age-Adjusted Mortality Rate between 2017 and 2018, by Cause of Death



- Between 2017 and 2018, age-adjusted mortality rates increased for 9 of the top 10 causes of death in Bexar County.
- The largest increase was for ‘Nephritis, Nephrotic Syndrome, and Nephrosis’, followed by ‘Accidents’, and ‘Chronic Lower Respiratory Disease’.
- Septicemia was the only cause of death that showed a decrease from 2017 to 2018.



15 % increase in mortality from **Kidney Conditions**

‘Nephritis, nephrotic syndrome and nephrosis’ refer to a group of conditions that involve inflammation of the kidneys, affecting their ability to properly filter blood and rid the body of chemicals and excess fluids.

The most common cause of death under this category is Chronic Kidney Disease. **Diabetes and high blood pressure are two of the biggest risk factors for chronic kidney disease.**

8.7 % increase in mortality from **Accidents**

The most common causes of death under Accidents were vehicle-related accidents, falls, and accidental poisoning by exposure to noxious substances (narcotics, hallucinogens, psychotropic drugs most common).

5 % increase in mortality from **Chronic Lower Respiratory Disease**

These include chronic bronchitis and emphysema (commonly designated as chronic obstructive pulmonary disease, or COPD), and asthma.

Leading Causes of Death – by Sex and Race/Ethnicity

Fig 3. Top 10 Causes of Deaths in Bexar County by Sex, 2018

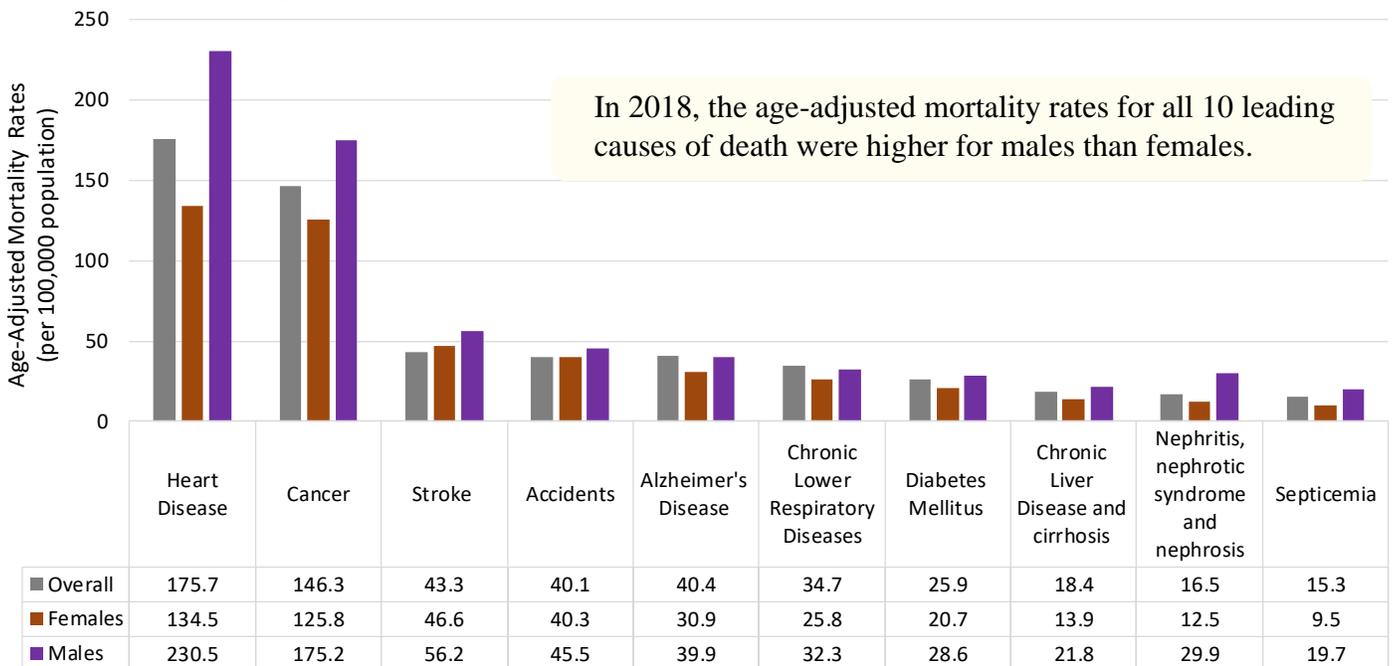




Fig 4a. 2018 Top 5 Causes of Death in Bexar County, by Race/Ethnicity (Females Only)

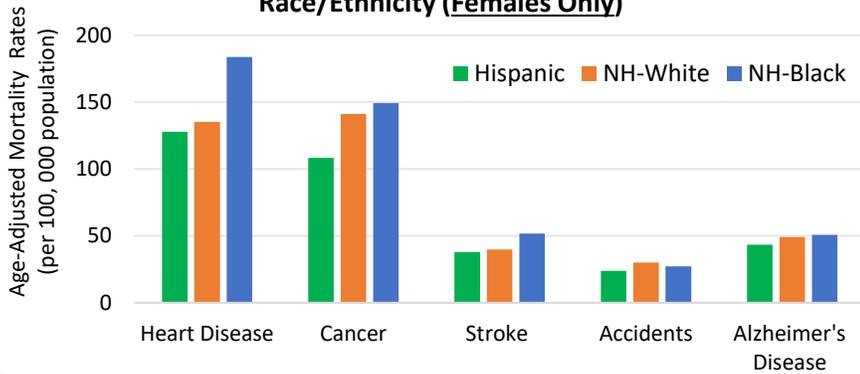
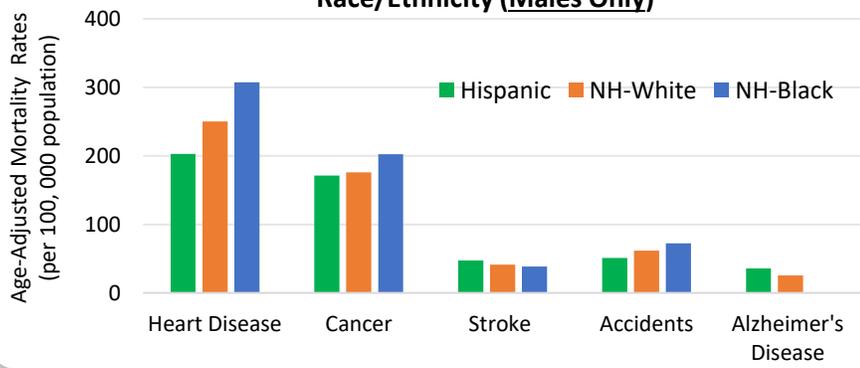


Fig 4b. 2018 Top 5 Causes of Death in Bexar County, by Race/Ethnicity (Males Only)



- Non- Hispanic Black females led the mortality rate for Bexar County’s top 5 causes of death in 2018, except for accidents which was highest in NH-White females.

- NH-Black males in Bexar County led the mortality rate for heart disease, cancer, and accidents in 2018.

- This means that regardless of gender, the NH-Black population in Bexar County led the mortality rate for both heart disease and cancer in 2018.

Leading Causes of Death Specific to each Race/Ethnicity

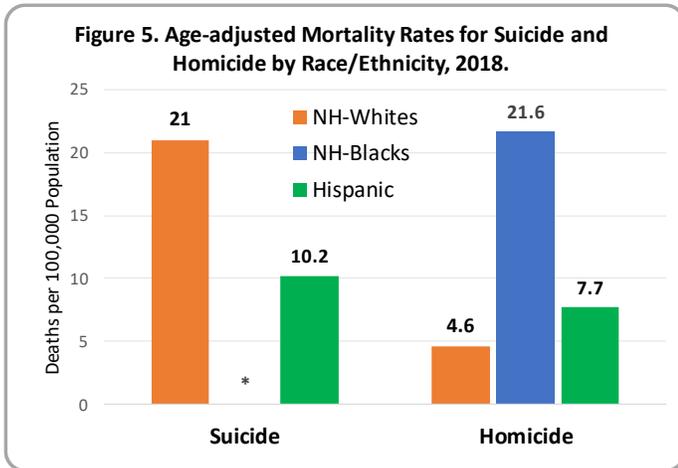
Table 6. Leading Causes of Death for each Race/Ethnicity in Bexar County, 2018

NH-White n (age-adjusted rate*)	NH-Black n (age-adjusted rate*)	Hispanic/Latino n (age-adjusted rate*)
Heart Disease 1,473 (185.9)	Heart Disease 293 (236.9)	Heart Disease 1,441(159.9)
Cancer 1,202 (155.8)	Cancer 221 (170.5)	Cancer 1,274 (134.2)
Chronic lower respiratory disease 389 (48.5)	Stroke 62 (54.1)	Stroke 376 (42.6)
Accidents 304 (45.5)	Accidents 68 (48.5)	Alzheimer's Disease 326 (40.7)
Stroke 330 (41.5)	Alzheimer Disease 43 (41.4)	Accidents 393 (36.6)
Alzheimer Disease 333 (40.0)	Diabetes Mellitus 49 (38.6)	Diabetes Mellitus 295 (31.4)
Suicide 120 (21.0)	Chronic Lower Respiratory Disease 35 (29.4)	Chronic Liver Disease and Cirrhosis 234 (22.9)
Diabetes Mellitus 133 (17.6)	Nephritis 28 (22.5)	Chronic Lower Respiratory Diseases 195 (22.6)
Septicemina 108 (14.4)	Homicide 35 (21.6)	Nephritis 166 (18.0)
Chronic Liver Disease and Cirrhosis 102 (14.4)	Septicemia 27 (20.2)	Septicemia 154 (16.0)

*Rates are per 100,000 population.



- No matter what the race/ethnicity, heart disease and cancer are at the top of the list for causes of death.
- Chronic lower respiratory disease was the third leading cause of death for NH-White individuals, however it ranked several spots lower for NH-Black individuals and Hispanic/Latinos.
- Suicide appeared within the top 10 causes of death only for NH-White individuals.
- Homicide was among the top 10 causes of death for NH-Black individuals, but it did not rank in the top 10 for NH-White individuals and Hispanic/Latinos.



- Examining race/ethnic differences for suicide and homicide, the suicide mortality rate for NH-White individuals is double the rate seen for Hispanic/Latinos (rate for NH-Black individuals is negligible, thus suppressed).
- NH-Black individuals, however, have the highest age-adjusted mortality rate for homicide. **NH-Black individuals die from homicide at a rate 3-4 times higher than that of NH-Whites and Hispanic/Latinos.**

Leading Causes of Death Specific to each Age-group

Table 7. Leading Causes of Death for each Age-group in Bexar County, 2018

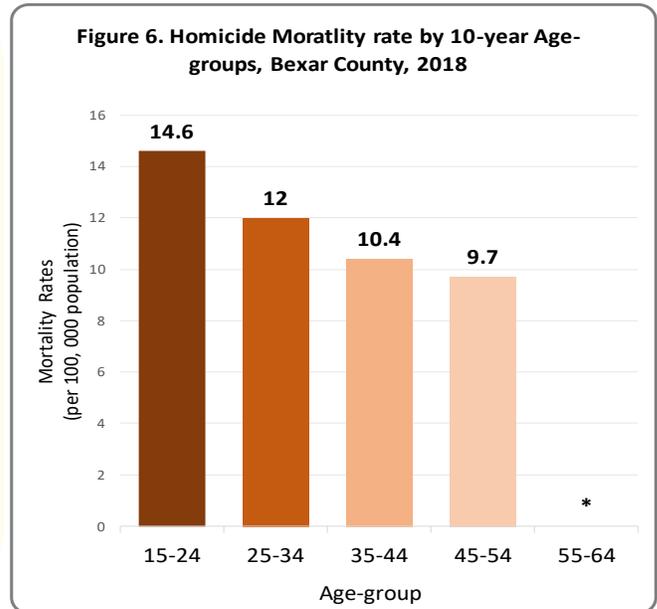
1-14 Yrs.	15-24 Yrs.	25-44 Yrs.	45-64 Yrs.	65-74 Yrs.	85+ Yrs.
Cancer 13 (**)	Accidents 57 (19.8)	Accidents 193 (32.9)	Cancer 798 (178.4)	Heart Disease 1,429 (673.8)	Heart Disease 1,094 (3,383.6)
Accidents 10 (**)	Suicide 53 (18.4)	Heart Disease 105 (17.9)	Heart Disease 647 (144.7)	Cancer 1,420 (669.5)	Alzheimer's Disease 492 (1,724.1)
	Homicide 42 (14.6)	Suicide 104 (17.7)	Accidents 212 (47.4)	CLRD 352 (166)	Cancer 447 (1,566.4)
	Cancer 12 (**)	Cancer 97 (16.5)	Liver Disease/Cirrhosis 186 (41.6)	Stroke 332 (156.5)	Stroke 305 (1,068.8)
	Heart Disease 10 (**)	Homicide 66 (11.3)	Stroke 143 (32)	Diabetes Mellitus 250 (117.9)	CLRD 192 (672.8)
		Liver Disease/Cirrhosis 39 (6.9)	Diabetes Mellitus 133 (29.7)	Alzheimer's Disease 216 (101.8)	Accidents 129 (452)
		Diabetes 22 (3.8)	Septicemia 94 (21)	Accidents 171 (80.6)	Diabetes Mellitus 83 (290.9)
		HIV 18 (**)	CLRD 85 (19)	Nephritis 149 (70.3)	Nephritis 81 (283.8)
		Nephritis 16 (**)	Suicide 77 (17.2)	Septicemia 125 (58.9)	Parkinson Disease 73 (255.8)
		Septicemia 15 (**)	Nephritis 64 (14.3)	Liver Disease/Cirrhosis 123 (58)	Essential Hypertension 64 (224.3)

each cell shows: number of cases (rate); rates are per 100,000 population
CLRD = Chronic Lower Respiratory Diseases

- Accidents, suicide, and homicide are top causes of death in younger age groups. This is generally an expected pattern due to the fact younger people do not experience the more common older-age related causes of death, such as heart disease. Therefore, causes such as accidents, suicide, and homicide end up ranking at the top for younger age-groups.
- This is the case for accidents and suicide in Bexar County, however it does not hold true for deaths by homicide. In Bexar County, the mortality rate for homicide is indeed highest in the youngest age groups.

- Taken together, figures 5 and 6 reveal an important disparity that is seen in other parts of the US as well as nationally overall – **NH Black individuals, especially NH Black teens and young adults, are at highest risk of dying due to homicide. This is a trend that is seen consistently over time.**
- **This trend is largely attributed to the fact that NH-Black individuals are often disproportionately exposed to conditions such as unsafe neighborhoods, racism, concentrated poverty, as well as limited educational and occupational opportunities.¹**

1. Sheats et. al. Violence-Related Disparities Experienced by Black Youth and Young Adults: Opportunities for Prevention



Cancer is also a major cause of death within every age-group. Mortality from cancer in children, youth, and young adults is generally very low. Approaching mid-adulthood, mortality from breast cancer appears as the most common type of cancer mortality among 35-54 year-olds. Among those 55 and older, lung cancer is consistently the most common cause of cancer mortality, followed by colon cancer.

Age-Group	Most Common Type of Cancer
< 25 years old	* suppressed due to small numbers
25 - 34 years of age	* suppressed due to small numbers
35 - 44 years of age	Breast Cancer
45 - 54 years of age	Breast Cancer; Colon Cancer
55 - 64 years of age	Lung Cancer; Colon Cancer
65 - 74 years of age	Lung Cancer; Pancreatic Cancer
75 - 84 years of age	Lung Cancer; Pancreatic Cancer
85+	Lung Cancer; Colon Cancer

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Data source for all tables and figures: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death, 1999-2019 on CDC WONDER online database: <https://wonder.cdc.gov/ucd-icd10.html>